

Features

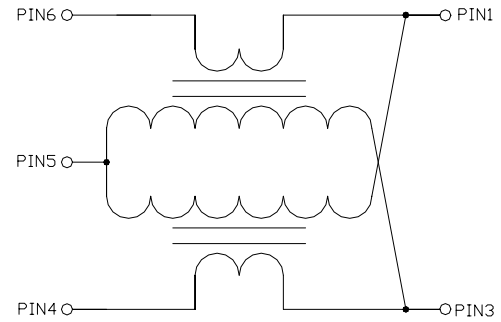
- Coupling 10dB Typical
- Surface mount
- low profile
- 260°C reflow compatible
- Excellent Return Loss
- Available on Tape & Reel

Description

M/ACom Technology Solutions ELDC-10 is a high performance 75 Ohm Coupler, in a low cost, surface mount package. The ELDC-10 is designed for use in high volume CATV applications. Typical applications include Set top Boxes, Network Interface Units, Line Amplifiers and Head end equipment.



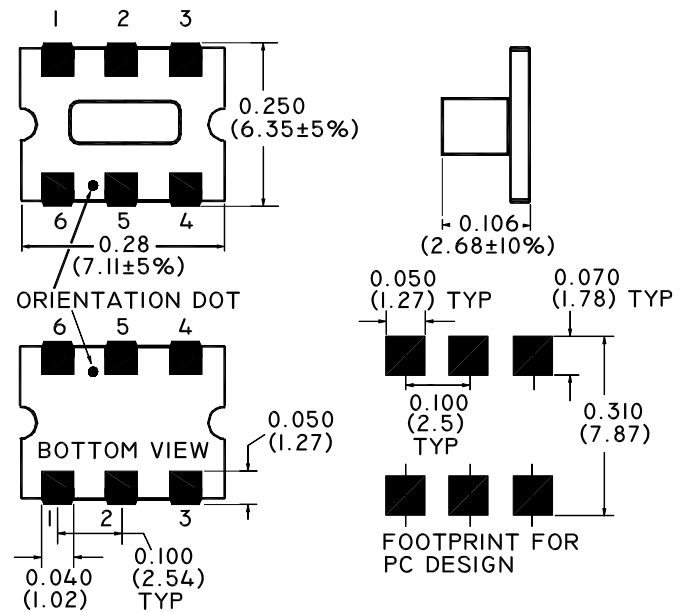
Schematic



Pin Configuration

Pin no.	Function
1	Output
2	Not connected
3	Isolated
4	Coupled
5	Ground
6	Input

Component dimensions



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010, unless otherwise stated

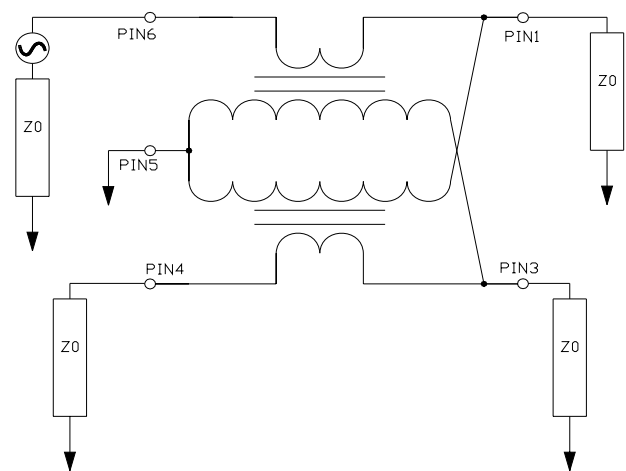
Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Frequency	Units	Min	Typ	Max
Main Line Loss	5 - 500 MHz	dB	-	0.9	1.3
	500 - 870 MHz	dB	-	1.0	1.5
Coupling	5 - 870 MHz	dB	-	10	± 0.5
Coupling Flatness	-	dB	-	-	1.0
Directivity	5 - 500 MHz	dB	23	20	-
	500 - 870 MHz	dB	21	17	-
Input Return Loss	5 - 870 MHz	dB	20	18	-
Output Return Loss	5 - 870 MHz	dB	20	18	-
Coupling Return Loss	5 - 870 MHz	dB	20	18	-

Recommended Maximum Ratings

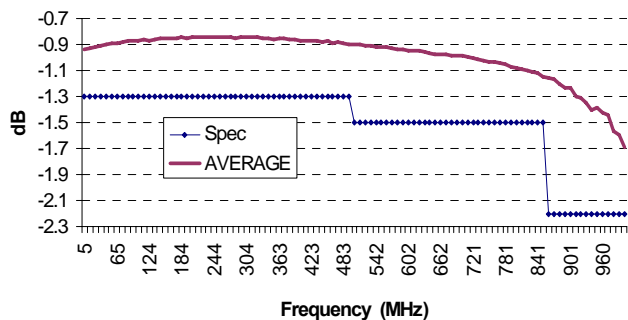
Parameter	Value
Input power	At least 250mW
DC current	At least 30mA
Operating Temperature	-40°C to $+70^\circ\text{C}$
Storage Temperature	-55°C to $+100^\circ\text{C}$

Application Circuit

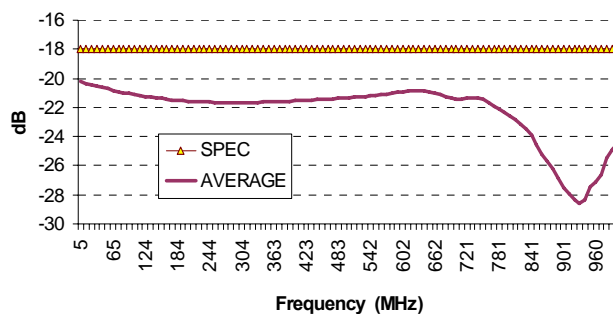


Typical Performance Curves: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 75\Omega$, $P_{in} = 0\text{dBm}$

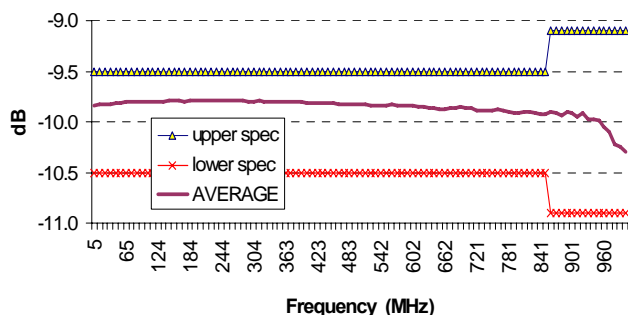
Main Line Loss:



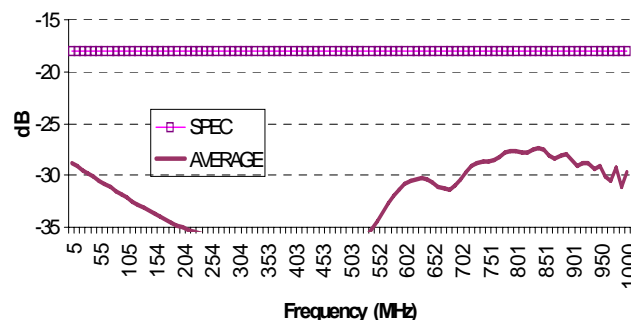
Input Return Loss



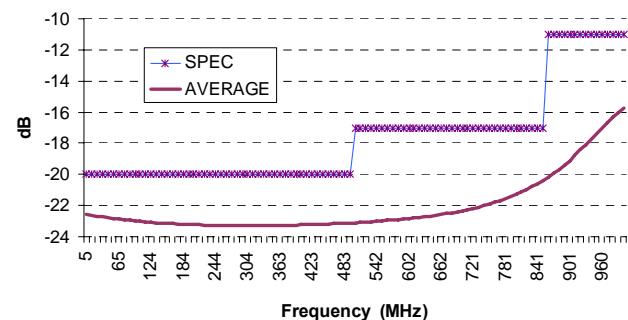
Coupling



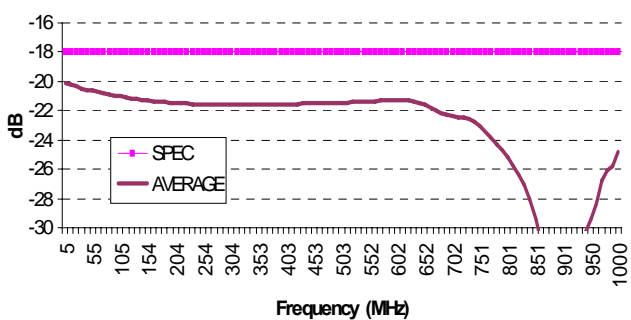
Output Return Loss



Directivity



Coupled Return Loss



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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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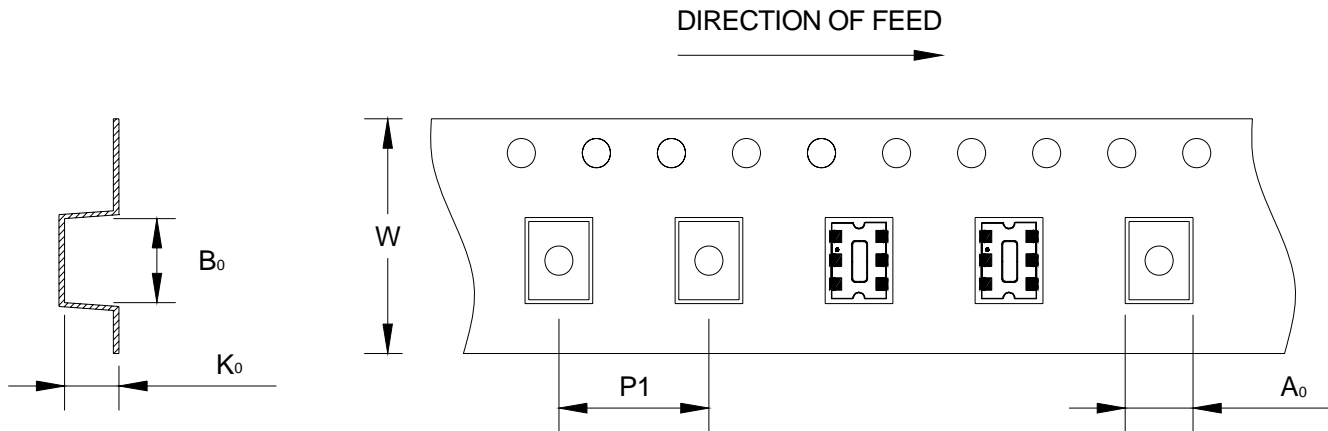
ELDC-10



Coupler, 10dB
5 to 870 MHz

Rev. V1

Tape & Reel Information



Item	Dimension
Ao	7.1mm +/- 0.1mm
Bo	8.1mm +/- 0.1mm
Ko	3.5mm +/- 0.1mm
W	16.0mm +/- 0.3mm
P1	12.00mm +/- 0.1mm

Ordering Information

Part number	Description
ELDC-10	900 piece reel